

THE AMERICAN JOURNAL OF
OPHTHALMOLOGY.

VOL. XIII.

JULY, 1896.

NO. 7.

ORIGINAL ARTICLES.

TWO YEARS IN A SOUTHERN EYE CLINIC; WITH
ESPECIAL REFERENCE TO DISEASES OF
THE EYE IN THE NEGRO; FOUR
THOUSAND ONE HUNDRED AND
SIXTY CASES ARRANGED IN
STATISTICAL TABLES.¹

BY HENRY DICKSON BRUNS, M.D.,

PROFESSOR OF DISEASES OF THE EYE IN THE NEW ORLEANS POLYCLINIC;
SURGEON IN CHARGE OF THE EYE DEPARTMENT OF THE EYE, EAR,
NOSE AND THROAT HOSPITAL; LATE PATHOLOGIST TO
THE CHARITY HOSPITAL, NEW ORLEANS, LA.

I desire to present for your consideration a set of tables² which display in compact form the result of two years' work in diseases of the eye in my clinic at the Eye, Ear, Nose and Throat Hospital of this city. A careful record of four thousand odd cases, a compilation of these records, and their analysis in tabular form must needs afford many items for information and food for much reflection. Indeed, the points of interest are so numerous, that I would not dare to exploit them, at too

¹Read before the Louisiana State Medical Society at the meeting held in May, 1895.

²On account of the elaborateness of the statistical tables accompanying this article we are forced to continue them in succeeding issues of the Journal.—Ed.

great a length for fear of consuming too much of your valuable time, and becoming tedious rather than entertaining or instructive. I shall call your special attention therefore, only to what these tables can teach us as to the predisposing cause of various eye diseases determined by age, sex and, above all, by race, leaving each individual to satisfy any curiosity he may have on other subjects by browsing through the multitudinous figures.

For such statistical studies it is of prime importance to establish in the first place the fixed or normal percentage for the group of cases considered of in each item of special study.

I have endeavored, therefore, to determine with the greatest care the average of age of all patients attending my clinic, and also the percentage of the sexes and of the white and black (including all of the African blood) races among them. The average age can only be approximately determined for our whole attendance.

From the figures of the Secretary of the Hospital I am able to state that for four years past of 19,710 patients who attended our clinics 14,196 or 72+ % were adults (over 21 years of age); 3,674 or 18+ % were children up to 10 and 1,840 or almost 1 % were children from 11 to 15 years of age. Where the average age, therefore, of a group of cases exhibiting a particular disease falls below 21, and particularly where it is found to be between 11 and 15 it should deserve especial attention as showing in marked degree a particular liability in persons of that age to the disease in question. For example, when we find the average age of a goodly number of cases of chalazion (mean of upper and lower lids) to be 24 years, of styte to be 22 years, of interstitial keratitis to be 17 years, of phlyctenular ophthalmia (mean of whites and blacks) to be 15 years, and of blepharitis marginalis to be 14 years, we can be absolutely certain that these are diseases of adolescence. For the 4,160 cases tabulated we can arrive at a more positive normal by adding together all the average ages and taking their mean; this mean we find to be almost exactly 30 years. This figure signifies to my mind that the vast majority of our patients are neither young nor old but of average age, in full adult life, and when we find that the average age of all our cases of non-traumatic iritis is about the same, I construe it to mean that iritis has no predilection for any particular age, but

is common throughout all functional life, its limits being pretty definitely fixed by the extremes recorded, 13 to 71 years. On the other hand, the determination of this mean makes more certain the conclusion that the diseases above mentioned are those of youth and are peculiar to that condition.

The normal percentage of the sexes, among those in attendance in my clinic can be quite definitely fixed during the four years since the foundation of the institution, of the 19,710 patients who have visited its clinics 9,785 were males and 9,925 were females; the latter forming, in other words, a trifle over 50% of the total attendance. Of the 4,160 cases here tabulated more than 47% were females, and in the face of these figures I think it fair to say that the patients attending my clinic are almost equally divided as to sex. The tables show that this normal percentage, etc., of the sexes is almost maintained in diseases and injuries of the lids and lachrymal apparatus 51+%; of the conjunctiva 50+%; of the lens 43+% and of the extrinsic muscles of the eyeball 47+%. In diseases and injuries of the lids and lachrymal apparatus a glance suffices to show that the slight excess of females is due to the greater frequency (a well established fact) in that sex of dacryocystitis, while the figures for males are kept up by the slight excess of traumata, this latter fact also accounts for the moderate excess of males among patients with diseases and injuries of the lens.

On the other hand, the percentage of females falls decidedly below the normal rate in patients with diseases and injuries of the cornea and sclera, (33+ %); iris and ciliary body, (32+ %) and choroid (34+ %). Here again traumatism is responsible for the greater number of males among the corneal cases, the number of males suffering from abrasions, burns, ulcers and foreign bodies on the cornea being largely in excess of the females.

For diseases of the iris, ciliary body and choroid syphilis undoubtedly plays the chief rôle and determines the great prevalence of these diseases among the male sex for it must be conceded as a general rule, all classes of the population being considered, that a greater number of uninfected males go to one contaminated female than of uninfected females to one contaminated male.

As nearly all the affections classified under diseases and

injuries of the whole eye, are traceable to violent traumatism, it is not surprising to find males constituting more than 70% of the whole number of cases (females, 28+ %); while in the other class of cases in which the percentage of females falls the very lowest (25 %), I can for the present (the number of cases being small, 140) express only the tentative opinion, that tobacco, alcohol and syphilis play prominent parts in the causation of the various forms of neuritis, atrophies and toxic amblyopias which determine the excess of males. In two classes of cases only does the percentage of females surpass the normal rate, but in these two instances the excess is broad and unmistakable. We are as yet too ill-informed as to the etiology and pathology of glaucoma for me to hazard an opinion as to why the female sex should be more liable (67+ %) to this disease than the male, but in case of refractive errors the explanation is clear; it is the nature of the employment, that determines the origin of some of these deformities, and as to others whether they shall remain innocuous or become sources of annoyance or incapacity. A record of the table of employments of those suffering from errors of refraction (503) shows that out of 51 various employments, three or less than 6% furnished 327, or more than 65% of all our refraction cases. These employments were: Housework (135), which among the wives of our laboring men means much, sewing both by hand and with the machine and usually by inferior artificial light, a lamp or candle; the seamstress handicraft (69), largely followed under similar conditions, and school work including boys, girls and teachers (123), all sedentary occupations, requiring much close application of the eyes.

It is to be observed that among the class who seek relief in clinics the females are for the most part those who live indoors and do much close work; in our offices the males compose the confined and close-working class and the females the leisure class, but the lesson taught by the school work that the conditions being equal the more delicate sex is the more injured, is not to be overlooked; the number of school girls (78) with refractive trouble are more than three times the number of school boys (24). On the other hand, the number of men engaged in common labors, out-of-door employments, in which the eyes are but little used for near work, was only 20, or not quite 4%, although laborers form more than 11%

of all the patients 19,710 who have visited us for any and every cause during the past four years. These figures are of no little comfort in one respect to the oculist. The opprobrium of the specialist is the everlasting gossip that asserts that "Dr. So and So puts all of his patients into glasses," or, "it is no use to consult Dr. So and So, he will only give you spectacles." The reason is obvious. The class which consults an oculist in his office runs to the family physician or the specialist upon the first symptoms of anything being wrong with the eyes, and so rarely is the victim of any serious disease; it is too the very class that depends almost entirely upon the near use of the eye for both work and amusement; it is becoming day by day as civilization advances more liable to refractive defects and their incident discomforts while *pari passu* the oculist by the process of his beautiful art becomes more skillful in recognizing these defects and their consequences and in relieving them by the proper application of lenses. The total number (766) of cases of error of refraction and affections of the extrinsic muscles forms but 18.4% of the whole 4,160 cases recorded in these tables, while 81.6% were cases of diseases of the eye. Were I considering my office practice the figures would be about reversed; from 75% to 80% would be cases of refractive or muscular error, or slight ailment, requiring but a word or two of good advice, while from 20% to 25% would be cases of more or less serious disease.

Turning now to the still more interesting question of race as a predisposing cause of disease, we must again seek first to establish the normal percentage of those of negro blood among the patients attending my clinic. This is very readily and very exactly done. Of the 4,160 cases in the tables, 1,113 were of African descent, a percentage of 26.75; of the grand total of patients, 19,710, who visited the hospital from December 5, 1889, to December 31, 1893, 14,580 were white, and 5,330 colored, a percentage of 27.04, which may be taken as the fixed or normal percentage rate.

It is probable that no clinic in the world presents advantages superior to those of the Eye, Ear, Nose and Throat Hospital for observing diseases of the eye as they present themselves in the negro race or those of negro blood, and for comparing the frequency with which this or that disease, or

this or that portion of the eye is attacked in the white or negro races.

The normal percentage rate (27.04) seems to be maintained in diseases and injuries of the lids and lachrymal apparatus, (27+ %); of the conjunctiva, (28+ %); of the cornea and sclera, (29+ %); of the lens, (27+ %) and of the optic nerve and retina, (24+ %). It would be unsafe, at any rate, to base any conclusions upon such slight variations in percentage unless a vastly larger number of cases could be had for calculation. The normal rate is very markedly exceeded in glaucoma, (37+ %); in diseases and injuries of the whole globe, (37 %) and in diseases and injuries of the iris and ciliary body, (55+ %).

Again, as to glaucoma, I have no conjecture to hazard; the explanation of the excess of negroes among cases of disease and injury of the whole eyeball is not far to seek; the reckless, exposed and dissipated lives they lead in a great city render them especially liable to these severe injuries (5 out of the 27 negro cases), while their improvidence and neglect of their own and oneanother's diseases makes common among them phthisis bulbi, panophthalmitis and sympathetic ophthalmia, (17 out of the 27 cases, 34 % of all such cases, white or black). The very high percentage rate of cyclitic and iritic troubles among them is due to the extreme liability of the race of iritis; of the 134 cases of disease of these tissues in negroes, 116 are cases of non-traumatic cyclitis, iritis, or their sequelæ; 45+ % of all such cases in both races and 38+ % of all cyclitic or iritic diseases or injuries; indeed, the 74 cases of non-traumatic acute iritis in this race alone, from 24+ % of the total cases of cyclitic and iritic disease, while the same cases (100) in the whites form but 33+ % of the total, 299 cases. Although, as we have seen, the whites outnumber the blacks in this clinic by almost 3 to 1. The saturation of the race with syphilis, the efficient cause of iritis, is the all-sufficient explanation of these facts. On the other hand, the percentage of blacks falls very low in diseases of the choroid, (16+ %); and cases of refractive iritis, (15 %); and anomolies of the extrinsic eye-muscles, (14+ %). That this should be true of choroidal disease is a surprise, and until I can gather together larger figures, I have no explanation to suggest; but as to refractive and muscular affections, this, as I have said else-

where³ is in consonance with all that experience and statistics have taught us. These defects are among the taxes laid by advancing civilization; the more sedentary, cerebral and ocular become the conditions of existence, the greater the advance in ophthalmic science, the larger grows the army of spectacle wearers. On the contrary, mechanics, laborers, woodmen, cowboys and savages have, as their lives keep them more and more in the open, as their eyes are less "blinded" by "pouring over miserable books," less and less need of eye-glasses. Of the 71 negroes with refractive defects recorded in the tables only 6 (6 out of a total 1,113 negro eye cases!) are set down as near-sighted, while only 9 have complicated eye defects (H. H. as. 8 and M. M. as. 1). As, however, they advance in civilization they will be called upon to bear its physical as well as its other burdens. In the clinics and on the streets of New York, Boston and Philadelphia near-sighted negroes are not infrequently seen. It is to be observed that but 5 cases of strabismus in colored persons are recorded, in the affections of extrinsic muscles table, while this and other musculo-refractive anomalies are noted 90 times among the 128 white (70+%). Eleven of those 21 negro cases are paralytic affections most often due to syphilis. I can not recollect having seen a really dark negro with strabismus save as the result of old disease or injury of one eye. Thus the lesson learned in considering these defects of vision in relation to sex is here repeated and emphasised.

Pushing now our investigations more into detail, we find that chalazion is almost the only lid disease to which the negro is subject; of the 127 negro cases in the table of lid and lachrymal disease, 68 are cases of chalazion, 53+%; while the malady forms but 21+% of all the white cases. The black negro rarely has blepharitis, the mulatto not infrequently, this malady forming but 11+% of the diseases of the lid in the negro against 30+% in the white. Catarrhal conjunctivitis forms 32+% of conjunctival diseases in the whites and only 18+% in the negro; phlyctenular ophthalmia forms 40% of all negro and only 17% of all white cases; pterygium forms 8% of all negro, and only 5+% of all white cases. The rarity of

³Fourth Annual Report of the Eye, Ear, Nose and Throat Hospital, 1893, page 50.

DISEASES OF LIDS AND LACHRYMAL APPARATUS. — 464 CASES.

DIAGNOSIS.	RACE:			SEX:		AGE.		VISION:		TREATMENT.	DURATION OF TREATMENT.	CONDITION ON DISCHARGE.	REMARKS.
	W.	N.		M.	F.	from	to	avg.	from	to			
Abcess of lachrymal sac.	4	6		5	5	6	69	33	20/20	10/200	One case completed treatment in 3 mos., others left after a few days	Cured, 1 case	
Abcess of lid	6	5		6	5	3	50	29	20/15	20/40	Poulticing and lancing; one small one underwent resolution under hot poulticing and bathing	Cured, 2 cases	
Blepharitis, marginal	101	15		54	62	1	68	14			Yellow ox. mercury salve	Cured, 16 cases in '94, in '93 exact number not known	
Burn of lid	10	1		8	3	3	17	8	20/15	20/60	Dressed and dischrg'd of burn from cigarette was treated 17 days	Cured, 21 cases	
Chalazion of upper lid	40	45		38	47	3 months	69	27	20/15	20/100	Removal through skin. Spontaneous disappearance by day appointed for operation	Cured, 1 case	
											Disappearance under hot applications	Cured, 2 cases	
											Suppuration under hot application; incision	Cured, 1 case	
											Incision and curetting; return in 4 days; removal through skin	Cured, 1 case	
											Electrolysis; 6 cases	Cured, 2 cases	Result unknown in 3 cases

Chalazion of lower lid	33	24	28	29	1	60	21	20/15	20/30	Incision through conjunctiva and (curetting)	Average in 22 cases	22 cases
Dacryo-cystitis	30	2	7	25	2	76	37	20/30	20/60	Suppuration under poulitice	One case 2 days	Cured, 1 case
Displaced puncta	4	1	3	2	22	70	54	20/30	20/60	Electrolysis, 3 cases	One case 7 days	Cured, 1 case
Echymosis (traumatic)	1	2	2	1	16	27	21	20/30	20/40	Bowman's operation and probes	Average 90 days in 7 cases	Cured, 7 cases
Ectropion	3	1	3	1	2 months	72	50	20/30	20/40	No further record		
Eczema	5	1	4	2	4	29	10	20/30	20/40	No treatment		
Empyema (traumatic)	1		1			25		20/30		No further record		
Entropion	1					55		l.p.		Declined operation		
Epicanthus (traumatic)	1		1			19		20/15		No further record		
Epithelioma	3	2	2	3	24	60	42	20/30	20/30	No further record		
Fistula of frontal sinus through upper lid		1	1			55				No further record		
Fistula of lachrymal sac	2		1	1	5	48		20/30		Refused treatment		
Granuloma (growing from abscess cavity)	1			1		4				Excised, cavity curetted, dressed	Eleven days	Cured
Mucocoele of lachrymal sac	2		1	1	17	24		20/20		Bowman's operation and probes	One case about 2 months	Cured, 1 case
Nævus of upper lid (small)	1		1			25		20/20		Cut away and curetted; returned in five weeks; electrolysis; ran away		Stationary
Occlus'n of palpebral fissure (burn)		1	1			11		0		Incision	Eighteen days	Unimproved; globe atrophic

Result unk'n 2 cases.

Struck on nose while boxing.

Treated a month; remained away 5 mos.; then again treated 1 month.

DISEASES OF LIDS AND LACHRYMAL APPARATUS.—CONTINUED.

DIAGNOSIS.	RACE:		SEX:		AGE,			VISION:		TREATMENT.	DURATION OF TREATMENT.	CONDITION ON DISCHARGE.	REMARKS.
	W.	N.	M.	F.	from	to	avg.	from	to				
Occlusion of puncta	2		1	1	10	57		20/20	20/200	No further record			
Edema of lid (cause unknown)	10	5	10	5	1	60	24	20/15	20/70	To cases lead and opium compress; 1 case cold compress and borax wash Sent to dentist	Five and 2 days; 5 days	Cured, 3 cases; 12 cases no further record	
Edema of lid (dental irritation)	1		1			32		20/15					
Edema of lid (malarial)	2	1	3		24	45	32	20/20		Quinine	Average 17 days	Cured, 3 cases	Two cases monocular.
Edema of lid (sarcoma)	1		1			33		0		Potass iod.	Thirty days	Sarcoma of molar bone recognized	
Edema of lid (traumatic)	1	1	2		5	17		20/15		Hot applications	One case 1 day	Cured, 1 case	
Papilloma of lid	2		1	1	18	40		20/20		One excision; one de- clined operation	One case 2 days	Cured, 1 case	
Pediculi tarsi	2		2			12		20/20	20/50	Yellow ox. mercury salve	Seven days	Cured	
Scar, recent (chalazion imperfectly removed)	1		1			30				Incision and curetting	No further record		
Sebaceous cyst. ext. orbital angle	2	1		3	12	16	14	20/15		Excision	Average 14 days	Cured	
Sebaceous cyst of lower lid	2	1	2	1	9	56	34	20/15	20/20	Excision and curetting	Average 7 days	Cured, 2 cases	
Sebaceous cyst of upper lid	2			2	23	44		20/20	20/50	Never returned for treatment			
Skin test of lid	1		1			13		20/20		Sipped off		Cured	

Stricture of nasal duct	6	2	3	5	11	53	29	20/30	20/30	Bowman's operation and probe No. 5	One case 20 days	Cured, 1 case
Stye	34	9	19	24	1	63	22	20/15	20/100	Hot applications and incision	From 1 to 11 days	Cured
Trichiasis	5	1	3	3	36	76	61	20/40	l.p.	No further record		
Ulcer	3	1	1	2	23	72	23	20/50		No further record		
Wounds	9	1	8	2	8	56	21	20/30	20/40	Antiseptic dressing	One case 4, and 1 5 days; others never returned	Cured
Totals	335	129	226	238								

Percentage of Females, 51 + %. Percentage of Negroes, 27 + %.
Chalazion in Negroes = 53 + %; in Whites 21 + % of all Lachrymal and Lid Diseases.

DISEASES OF THE CONJUNCTIVA. — 1290 CASES.

DIAGNOSIS.	RACE:		SEX:		AGE:			VISION:		TREATMENT.	DURATION OF TREATMENT.	CONDITION ON DISCHARGE.	REMARKS.
	W.	N.	M.	F.	from	to	avg.	from	to				
Abscess of caruncle													
Burn (with lime 10, fire cracker 2, toy torpedo 2, roman candle 1, powder 3, lye 1, HCl 1, hot grease 1, hot iron 1, carbolic acid 1, ammonia 2, by lightning-stroke 1)	23	3	23	3	4	64	26	20/15	l.p.	Incision and hot bathing Hot or cold applications, borax wash, atropine, cocaine and castor oil	Three days One fire cracker case 4 days; 2 lime cases 15 and 18 days; lightning case 24 days	Cured Cured, 26 cases	Lightning stroke 24 hours before admission; unconscious 10 mins.; eyes red and painful with photophobia; had some conjunctivitis before shock; catarrhal conjunctivitis after burn cured.
Chemosis	3		2	1	26	43	36	20/15	20/40	Hot applications; borax wash	No further record		

DISEASES OF CONJUNCTIVA. — CONTINUED

DIAGNOSIS.	RACE:		SEX:		AGE:			VISION:		TREATMENT.	DURATION OF TREATMENT.	CONDITION ON DISCHARGE.	REMARKS.
	W.	N.	M.	F.	from	to	avg.	from	to				
Conjunctivitis, catarrhal	297	68	174	191	2 months	79	26	20/10	20/200	Arg. nit. grains ss to v (usually), seldom to gr. x, and hot borax wash at home Borax, camph. aq. and hydragristis wash	Fr. m 2 to 81 days; in 73 cases average 21 days Three cases; 7, 11 and 3 days Two cases; 10 and 27 days Four cases; 5, 7, 16 and 24 days	Cured, 78 cases	
Conjunctivitis, catarrhal, with bleph. margin.	15	3	5	13	3	50	20	20/15	20/100	Argt. nit. and yellow ox. mercury salve	Three cases; 5, 17 and 210 days.	Cured, 2 cases; long case worse	
Conjunctivitis, catarrhal, with corneal ulcers	6	5	6	5	2	68	30	20/30	15/200	Argt. nit., gel. ox. mercury salve, and hot bathing	One case; 18, and one 20 days	Cured, 2 cases	One case confirmed by bacteriological examination. 1 case in June and 1 case in August.
Conjunctivitis, diphtheritic	2		1	1	15 mths	19 m				Argt. nit. and hydrogen peroxide wash			
Conjunctivitis, phlyctenular; with and without pustules and ulcers of the cornea	162	145	108	199	whites 1 negr's 18 mos	56 65	15 17	20/10	10/100	Calomel insufflated Yellow ox. of mercury salve	In 37 cases average 27 days In 34 cases average 26 days	Cured, 71 cases; others ran off; treatment was completed	Under various treatments 56 purely conjunctival cases were cured in 28 days, while 22 cases with corneal complications were cured in 48 days; under various treatments 43 whites were cured in 28 days and 25 negroes in 31 days.

	23	7	23	7	1	45	18	29/30	l.p.	Argt. nit. gr. v to x and listerine wash	In 5 cases from 11 to 56 days; average 30 days	Cured, 5 cases	Fifty per cent. at least low Italians.
Conjunctivitis, purulent.													
Conjunctivitis purulent of newborn	38	10	26	22	1 week	16 wks.	4			Argt. nit. gr. v to x and listerine wash (cleanliness)	In 24 cases from 7 to 67 days, average 25 days	Cured, 24 cases	
Conjunctivitis, trachomatous	84	8	52	40	5	74	27	20/30	l.p.	Argt. nit. gr. v daily in 1 acute case in negro	Ten days	Only this one cured	
Conjunctivitis, vernal		3	2	1	4	14		20/15	20/30	Yellow ox. mercury salve at home	No further record		
Cyst	3		2	1	1	21		20/30		Incision under cocaine	In one case 1, in one 2, and in one 14 days	Cured, 3 cases	
Ecchymosis	35	11	27	19	1	64	24	20/18	20/100	No treatment	Two cases observed, blood was gone in 10 days		Traumatic 11, from coughing 5, vomiting 1, unknown 29 cases.
Foreign body, embedded	2		2		18	22		20/30		Removal under cocaine	One 3 and one 1 day	Cured, 2 cases	
Foreign body, encysted	1			1		8		20/30		Removal under cocaine	Eight days; vision then 20/40	Cured	Had been 2 years in R. E.
Foreign body under upper lid	39	9	32	16	1	65	27			Removal under cocaine		Cured	Body in eye 3 weeks in 1 case.
Granuloma	5	1	1	5	2	45	21	20/30		Removal under cocaine	Longest case was healed in ten days	Cured	
Hyperæmia	111	44	83	72	1	70	29	20/10	20/50	Borax wash or AgNO ₃ gr. ij to v	In most cases prescribed w a s h and discharged; those observed from 4 to 49 d'ys	Cured	One case due to fallen eye lash getting into punctum l.
Hypertrophy of papillæ	1			1	9			20/15		AgNO ₃ solid stick	Sixteen days	Cured	
Lithiasis	2	1	1	2	36	45	40	20/30		Scraped out	Two days	Cured	

DISEASES OF CONJUNCTIVA. — CONTINUED.

DIAGNOSIS.	RACE:			SEX:		AGE:			VISION:		TREATMENT.	DURATION OF TREATMENT.	CONDITION ON DISCHARGE.	REMARKS.
	W.	N.	M.	F.	from	to	avg.	from	to					
Edema of conjunctiva and lid (monocular malarial)	2			2	11	17		20/20			Quinine in full doses	Four days	Cured	
Pinguecula, inflamed	10	10	10	10	18	40	26	20/15	20/30		Yellow ox. mercury salve	Two cases observed recovered in 10 days	Cured	
Pterygium	55	29	52	32	12	78	35	20/12	20/100		Removal under cocaine in 56 cases others declined operations	In 41 cases average 10 days	Cured, 56 cases	R.E. 10, L.F. 13, o. u. 7; not noted fifty four cases.
Symblepharon	2		2		11	29		20/30			Mild astringents	Never returned		One traumatic, 1 burn with lime.
Tumor: Dermoid		3	2	1	3	14	7	20/20			Remov'l under cocaine 1; chloroform, 1 case	Twenty three days	Cured, 2 cases	
Melanotic fibroma		1		1		15		20/30			Removal under cocaine	Nine days	Cured	
Papilloma	3		3		29	59	41.				Removal under cocaine, 2 cases	One 6 and one 13 days		
											Cauterized with carbolic acid, 1 case	Never returned	Cured, 2 cases	
Ulcer in lower cul-de-sac	1		1			59		20/30			AgNO ₃ gr. x; K. I. gr. x t. i. d.	Fourteen days	Cured	Von discharge—20/30.
Wound	3		3		13	31	23	20/30			Hot bathing and borax wash	Discharged at once		
Totals . . .	928	362	643	647										

Percentage of Females, 50 + %.

Percentage of Negroes, 28 + %.

[Tables to be Continued.]

trachoma among negroes is confirmed by this table, only 2% of trachomatous patients were found. I do not remember a case in a really dark negro. All were mulattoes. Indeed trachoma is not common among our population in general, our figures showing but 9% in the whites or only 92 (7+%) of all the 1,290 conjunctival cases. The disease seems to be almost entirely confined to German and Italian (Dago) emigrants with some cases from other states among low-class Irish.

Elsewhere (*ut supra*) I have ascribed this to the better conditions of food and ventilation under which our laboring classes live. Of corneal disease, ulcers and leucomata (the scars of ulcers) form 55+ % in negroes and only 31+ % in whites. It is singular that more than three times as many foreign bodies were removed from the corneæ and more than twice as many from the conjunctiva of whites as from those of negroes. These figures well illustrate the necessity for a knowledge of the habits and character of the race in drawing conclusions from such data. They are beyond doubt explicable by the facts that negroes seldom seek professional aid until the mischief has become serious (often irremediable) and that in this country they are comparatively infrequently employed as mechanics.

OBSERVATIONS CONCERNING THE ENDOTHELIAL LINING OF THE ANTERIOR CHAMBER IN HEALTH AND DISEASE.

[WITH MICRO-PHOTOGRAPHS.]

BY ADOLF ALT, M.D., ST. LOUIS, MO.

[CONCLUDED FROM JUNE NUMBER.]

Such enormous quantities of newly formed tissue on the anterior surface of the iris are not very frequently found. Yet smaller amounts of it, and especially concerning smaller portions of the iris, particularly in its lower half, are not so rarely seen.

In fact, whenever an occlusion of the pupil has taken place

and a "pupillary membrane" been formed long enough before the removal of the eye, a smaller or larger quantity of such newly formed connective tissue can be demonstrated. If nowhere else, it is always found near and at the pupillary edge. Figure 1 shows such a new formation on the anterior surface of the iris which further on (not shown here) joins a pupillary membrane of dense connective tissue.

However, the new formed tissue is by no means seen as a regular consequence of iritis; it seems that certain forms of stimulations are necessary to lead to such a proliferation of the endothelium on the anterior surface of the iris. I suppose, that certain toxines and fibrine and bloodcorpuscles deposited on the anterior surface of the iris and in the iris-angle, when larger amounts of blood have entered the anterior chamber, are frequently the cause.

Whether every proliferation of the endothelial cells may and will finally lead to such tissue-formations, it is impossible to say.

In some forms such a proliferation may surely exist and continue for a long time without producing spindle-cells and forming connective tissue.

This I have seen particularly in several cases of traumatic cysts of the iris. In Figure 2 the endothelium covering the remnant of iris-tissue which forms the cystwall is seen to be covered by endothelial cells which having formed layer upon layer seem to undergo a regressive metamorphosis, as they do not take on any staining. In other parts of the same specimen the nuclei can be stained yet poorly so. Nowhere is there one single layer of cells, however, as I have seen in other cases.

Finally, probably after a long period of existence the newly formed tissue, as well as the endothelium covering it, may undergo a regressive metamorphosis. This I have seen on two occasions in eyes of old people which had been injured many years previously. In these cases the iris tissue was perfectly atrophic and its bloodvessels had altogether disappeared.

The anterior surface of this iris tissue is (see Figs. 3 and 4) covered with a layer of a homogeneous strongly refracting substance from the anterior surface of which cell-bodies protrude. Although these protrusions take up no nuclear stain,

PLATES TO DR. ALT'S PAPER.—PAGES 207-209.



FIG. 1.



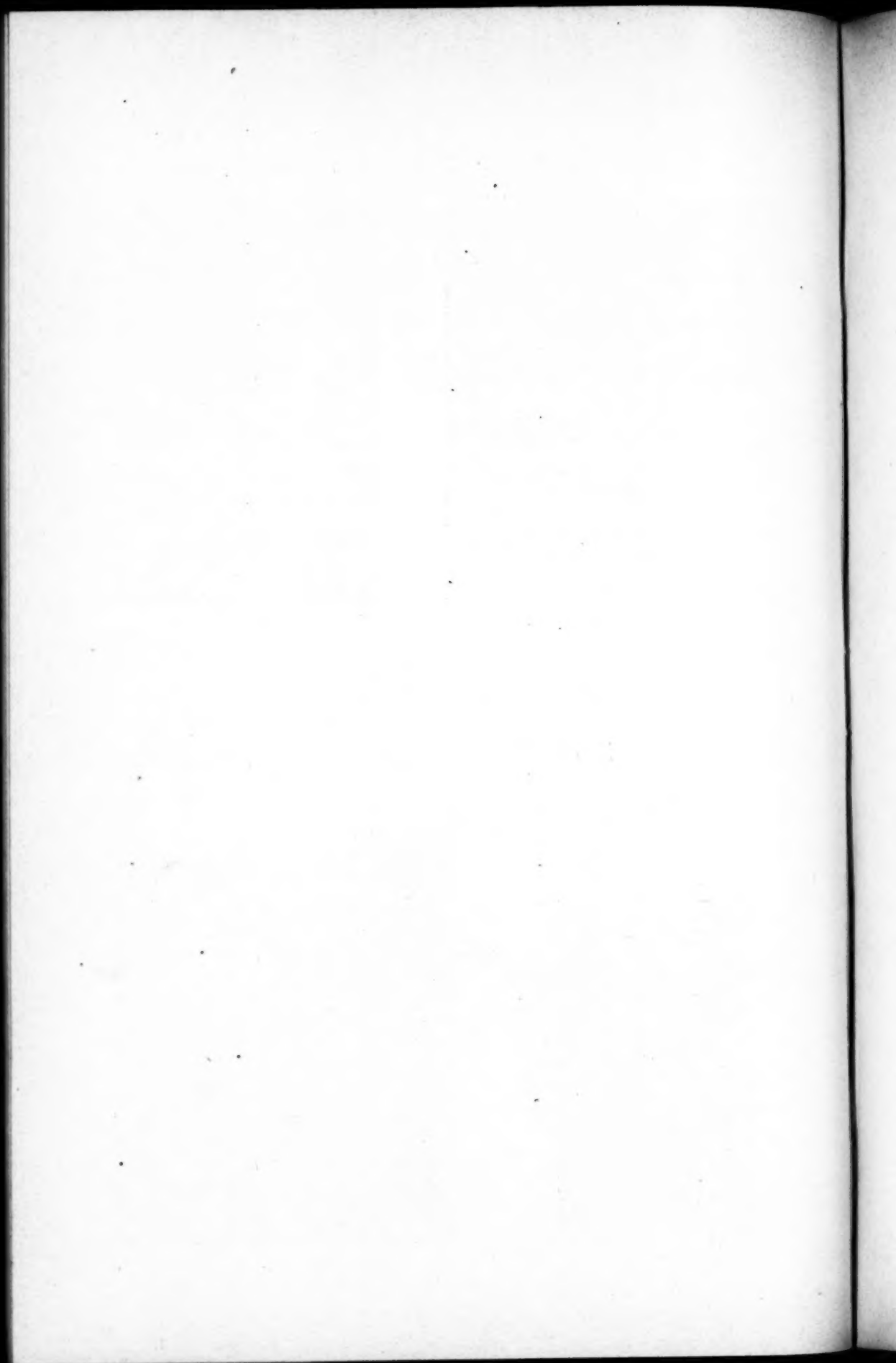
FIG. 2.



FIG. 3.



FIG. 4.



but a general rosy color from eosin or carmin and a general dark impenetrable blue from hematoxyline, I do not think we are mistaken in considering them to be endothelial cells like those we have shown on Figure 3, June, 1896, which here however have undergone a regressive, probably a colloid metamorphosis

Figure 3 is taken with a low, Figure 4 with a high power.

KERATITIS DENDRITICA.

BY FRANK ALLPORT, M.D., MINNEAPOLIS, MINN.,

PROFESSOR CLINICAL OPHTHAMOLOGY AND OTOTOLOGY, MINNESOTA STATE UNIVERSITY;
PRESIDENT MINNESOTA STATE MEDICAL SOCIETY; EX-SECRETARY OPHTHALMOLOGICAL SECTION OF THE AMERICAN MEDICAL ASSOCIATION, ETC.

Is there a corneal ulceration susceptible of a distinctive pathology and nomenclature, as indicated by the title; or is keratitis dendritica a variety of herpes corneæ, as believed by Horner, a product of malaria, as indicated by Kipp, or perhaps an ordinary corneal ulceration of protracted course, assuming peculiar and fantastic outlines? The literature on the subject is both incomplete and confusing, and no observer as yet appears possessed of well-grounded and crystallized opinions capable of solving the interrogations just propounded.

In 1889 Kipp presented a valuable contribution before the American Ophthalmological Society upon what he termed "Malarial Keratitis," presenting a report of one hundred and twenty cases. He cited many instances where dendriform outlines were assumed, but in most other respects his descriptions differ widely from the keratitis dendritica of other authors, although he is accredited by many observers with presenting the latter ulcerative type in a somewhat different garb. Kipp himself and others, such as Godo, de Schweinitz, Hotz and Wilder, believe that the identity of keratitis dendritica should be merged into that of malarial keratitis, which sometimes, but not always, assumes dendriform outlines. Notwithstanding his nomenclature, Kipp frankly admits that he has ob-

served cases similar to those he describes in non-malarial individuals, which finally yielded to other lines of treatment.

His cases, commencing "as a line of small grayish elevations, which soon broke down, forming a furrow of ulceration," numbered one hundred and twenty, which is, numerically, an argument against the identity of the disease with keratitis dendritica; for those advocating the isolated identity of the latter insist upon its rarity, protracted course and the inefficiency of treatment, which also is in discord with Kipp's observations, whose cases recovered with reasonable celerity under anti-malarial treatment, mild local remedies and the occasional use of the actual cautery.

In the discussion following Kipp's paper, Noyes, Sutphen, Green and Theobald concurred in having seen similar cases, apparently associated with malaria, and Gruening, while having met cases of this nature, considered them to be due to the saliva form tartarized teeth, with which some patients moisten the lids.

Altogether, Kipp's paper and the ensuing discussion would lead one to suppose, *not* that keratitis dendritica (so-called) was under discussion, but a form of corneal ulceration, sometimes assuming dendriform outlines—arbitrarily denominated malarial keratitis.

Horner, Kendall, Adler, Wangler, Hagnauer and other authorities describe a disease evidently intended to be identical with the foregoing, which is, primarily, of a distinctly herpetic type, frequently accompanied by herpes zoster facialis. Non of these observers disavow the possible malarial impulse preceding herpes, wherever situated, but stoutly maintain the occurrence of dendriform ulcerations in cases where no malarial tendency can be ascertained.

Fuchs, in one section of his work, classes the ulceration as of the serpiginous variety, and in another speaks of it as a form of herpes febrilis corneæ, a name originated by Horner. He evidently does not recognize a district type of ulceration, but considers keratitis dendritica as a mere peculiar outline of corneal ulceration, liable to occur in most varieties of the disease. He advocates especial, distinctive treatment, but discourages the use of eserine, as liable to provoke iritic complications and adhesions.

In 1884-85, Hansen Grut and Emmert coincidently de-

scribed the disease under consideration, and the former gave it the name of keratitis dendritica. Emmert believed it to be of scrofulous or tuberculous origin, but in this position he appears to be isolated. The followers of these two authorities dignify the affection into a distinct and typical variety of corneal ulceration, susceptible of an individual nomenclature, pathology and treatment. Noyes adopts the name proposed by Emmert and calls it "keratitis dendritica exulcerosa mycetica." He says:

"By this title Emmert describes cases which begin with a small superficial ulcer, and extend in a dendritic or branching form, close under the surface, making a figure resembling the twig of a tree. The lines are white and the epithelium is soon shed, leaving open furrows. Subjective symptoms are severe, and if the case when first seen is well advanced, it will be obstinate: recovery occupying six or more weeks. Investigation found bacilli in the infiltration.

"The only successful treatment was washing the eye with corrosive sublimate 1 to 1000 (how often is not stated), and repeated use of eserine vaseline ointment 20%. There is no tendency to iritis. For months after recovery the white streaks could be discerned. Hansen Grut describes cases, which in many respects are similar, but in which the subjective symptoms were not so severe and ulceration did not take place over the line of infiltration. He believed them to be mycotic, but was not able to prove it."

Schmidt-Rimpler calls it "furrow keratitis" and says:

"Linear prolongations proceed from a shallow corneal ulcer and subsequently ramify, and, after exfoliation of the surface, are converted into narrow deep grooves with gray edges. There is often photophobia with pronounced epiphora. The process lasts several weeks on account of the constant new formation of the branches, and leaves characteristic opacities for some time. (Emmert, Hansen-Grut.)

"At the beginning the irrigation of the foci, with a solution of corrosive sublimate and the application of eserine, appear to be useful."

Swanzy says:

"This is a rare affection to which attention was first drawn by Hansen Grut of Copenhagen. It is a very superficial and chronic ulceration, with but little infiltration on its margins or

floor and presenting the appearance of a fine groove in the cornea. It spreads chiefly over the central region of the cornea, by throwing out branches on either side. The pain and irritation is sometimes severe and again but slight, or quite wanting. Some permanent opacity often remains when cure has been effected. The cause has not been definitely ascertained but the peculiar progress of the affection renders it almost certain that some special fungus is engaged.

TREATMENT.

Scraping with a sharp spoon, with the subsequent application of 1 in 1000 solution of corrosive sublimate, is recommended by some and the actual cautery is of great use; but I am inclined to think, from my experience with the last few cases of the disease I have had under my care, that the application of absolute alcohol affords the most certain and rapid cure. I soak a bit of lint in the alcohol and scrub the surface of the cornea with it. This may require to be repeated two or three times."

Berry says:

"Another form of keratitis, which there is every reason to look upon as being also caused by some particular microbe, has only lately received attention since it was described by Hansen Grut. The characteristic of this inflammation is a great tendency to a kind of ramifying superficial extension. It is a very chronic affection and the amount of infiltration surrounding the ulcerated rills, which it forms, is so slight as to render the peculiarity of its propagation liable to escape detection, unless a proper examination be made by oblique illumination. The pain caused by this inflammation is slight, though sufficient to give rise to some discomfort and photophobia. When uncomplicated, this form of keratitis is always superficial and not accompanied by hypopyon. In not a few cases, however, which begin in this way, and no doubt as the result of inoculation with more active micro-organisms, a serpiginous hypopyon ulcer may make its appearance. The cause is not known. It is a tolerably rare affection, met with in both sexes, and for which the name, dendriform superficial keratitis, seems the most appropriate. The nebulous opacities, which remain for some time after recovery has taken place, have the characteristic ramifying appearance. The

treatment I have found most efficacious is to scrape the ulcerated rills with a small spud, such as is used for removing foreign bodies from the cornea, and afterwards apply a strong solution (1 to 1000) of corrosive sublimate, directly to the cornea, with a camel's hair brush, giving at the same time the iodoform ointment for frequent use. Latterly I have used pyoktanin which, though altogether useless in deeper corneal ulcerations, appears to be even more suitable than stronger antiseptics in dendritic keratitis. Chlorine water is also useful, when freshly prepared."

I now beg leave to report a case of my own, which, although varying in some features, was undoubtedly the keratitis dendritica of various authors.

Mr. D. T., age 30, suffers from gonorrhœa and gonorrhœal ophthalmia; the latter of a very mild type, which, when practically recovered from, left him with a central corneal ulcer of distinctly dendritic outlines.

The ulceration was superficial, certainly not extending deeper than the epithelium, and anterior elastic membrane, and when the cornea was cocainized and rubbed with a cotton tufted probe, the necrotic corneal tissue rolled up like thin birch bark, in the direction of healthy tissue, leaving the underlying corneal membrane perfectly healthy, clear and smooth. The ulceration did not at any time, extend beyond the most superficial corneal layers and the cornea never became injected or vascular. The dendriform character of the ulceration persisted in spite of frequent cauterizations, scrapings, etc., but finally its outlines succumbed to long interference and the necrotic area appeared very much like any other extensive corneal ulceration. I had the opportunity of watching the progress of this ulcer from its inception and found that it commenced as a fine irregular line of opacity, directly over the pupil, which soon necrosed, leaving a shallow furrow, with a healthy base. To either side of this central stem appeared several punctated opacities, which ulcerated, and subsequently became connected with the long central branch by a narrow furrow of ulceration.

The ulceration proceeded from the minor stems inwards, instead of from the major branch outwards. Thus the dendriform outlines, with club-shaped extremities, became established, and the case developed into what is known as kerati-

tis dendritica, unaccompanied at any time by indications of Zoster.

The patient suffered extreme pain and photophobia, which persisted with increasing violence, for six or seven weeks, until a very protracted healing occurred. The pupil was, with much difficulty, kept moderately dilated, but there was at no time any indication whatever, of iritis or hypopyon, although a mild conjunctivitis persisted during the whole course of the disease. His general condition, physically, mentally and nervously, was extremely poor, although he was invigorated by generous tonics, including enormous doses of quinine and arsenic.

The local treatment was thorough and varied, including atropine, hot fomentations, bichloride solutions, chlorine water, aristol, iodoform, formaline, galvanism, as recommended by Dunn, actual cautery, nitric acid, scrubbing with alcohol, etc., but I was unable to perceive much improvement from any of the enumerated remedies. I think the best results were obtained by the use of atropine, hot fomentations, scrubbing with alcohol and a saturated solution of boracic acid, used frequently in the eye-cup. The eye improved coincidentally with the general health and I think that such cases will perhaps always exist in individuals of depreciated vitality. The recovery was complete and, to my surprise, but little corneal opacity remains, although the ulcerated area was extensive.

Since then I have seen several cases of corneal ulcerations, assuming dendriform outlines, but none of them possessing the marked history of the foregoing, and I am beginning to feel that I have probably seen many such but have failed to recognize them.

Three distinct cultures were made for me at the Bacteriological Laboratory of the Minnesota State University of scrapings from the ulcerated surfaces, but failed to find anything distinctly characteristic, which would seem to disprove Swanzy's view, that the destructive process is instigated by "some special fungus."

From my experience with this case, coupled with the several bacteriological examinations made, I do not believe the disease to have a distinctive character. It is simply an obstinate superficial corneal ulceration, occurring in debilitated patients, and while dendriform outlines may be assumed, this

fact alone is surely not sufficient to render advisable a separate and confusing nomenclature and pathology

REPORT OF A REMARKABLE CASE OF PERSISTENT VISUAL IMAGE, CAUSED BY MONOCULAR NEURO-RETINITIS.

BY L. R. CULBERTSON, M.D., ZANESVILLE, OHIO,

OCULIST TO U. S. PENSION BUREAU FOR SOUTHEASTERN OHIO; OCULIST TO CITY HOSPITAL; B. Z. & C., AND C. & M. V. R. P., ETC.

Mrs. B. U., aged 40. Refraction R. E. + 2.5 D. sp. \ominus — .5 cyl. 165, V. = $\frac{1}{LX}$; L. E. + 2.5 D. sp. \ominus — .5 cyl. 165 = $\frac{1}{IV}$. Can only see slightly with outer half of retina of right eye. Says that for some time has had hemianopsia with this eye but none with the other eye. Also that she had anisometropia with this eye. For over a year she has had a most remarkable symptom in this eye, *i. e.*, that when she would look at a persons' face with the right eye, or if she would look at a newspaper, or any object, and then look across the room she would see distinctly the image of the face or type, or object she had been looking at and that the visual impression would last sometimes for five or six seconds. That she never saw these images in absolute darkness (no hallucinations therefore), although they appeared brighter by gas or lamp-light. I tested the eye with various colors to ascertain if the visual image would appear in the complimentary of the color shown, but it did not.

Says she constantly sees "flashes of light" before the eye. Says that fingers constantly pain her and joints swell at times. Has chronic rheumatism but never had acute rheumatism. Is very nervous. Frequently has neuralgia and headache.

Bowels and menstruation regular. Urine s. g. 1020, no albumen, no sugar, no tube-casts or uric acid. Did not test for urea.

Ophthalmological examination: R. E., severe neuro-retinitis ("wooly disc"), veins very large and arteries fine, vessels

indistinct in stroma from retinitis. L. E., disc hazy from papillitis; veins enlarged, arteries normal. Disc too pale and shows atrophic cupping. Temperature normal in both eyes. Pupil reactions not tested. Dilate normally to atropia.

Diagnosis: Neuro-retinitis caused by eye strain and gouty diathesis. Gave the usual treatment. There is no history of sunstroke. All reflexes normal. No mental disease or injury to head or spine.

June 19. Under treatment retinal haze has greatly cleared and shows post-polar choroiditis and atrophic retinitis in right eye.

REMARKS.

I have consulted a large amount of ophthalmic literature and can find no case similar to this.

There have been reported cases of monocular diplopia, anisometropia, polyopia, etc., but none of persistent visual image.

It is my belief that this remarkable phenomenon is due to the highly inflamed condition of the rods and cones of the retina, which so stimulates them and exalts their function that they are capable of retaining impressions either by themselves or through the agency of the rhodopsin or visual purple. The inflammation may have produced an excess of rhodopsin and this being absorbed slowly, or the photo-chemical change taking place slowly, caused a slow fading of the visual image.

It is generally believed that visual images and colors are held for a short time through the agency of the visual purple. In speaking of the causes of erythropsia Dr. Fuchs,¹ (Vienna), says: "As the rods are impregnated with visual purple it is probable that the phenomenon of erythropsia is due to the excess of the production of this purple under the influence of an excitation caused by strong light and a very active regeneration."

Prof. Birnbacher,² in speaking of the specimens of retinae of animals exposed to light and stained with acid reagents (eosine), "the coloring is light and diffused. In those not exposed to light, the ellipsoid of the cone is stained a deep rose color or blue, the other portions of the retina remaining color-

¹Reports Ophthalmological Society, Heidelberg, August, 1895.

²Von Graefe's Archives für Ophthalmologie, Vol. XL, No. 5.

less. Evidently, then, under the influence of light, some of the retinal elements undergo a change in their chemical properties; this does not imply that the action of light is confined to the cones, or that it occurs within the interior of the ellipsoid of the cone."

Dr. Knies³ says that "the eye accommodated for black sees colors otherwise than when it is accommodated for light. He explains it by a special arrangement which consists in the fact that the rods alone have the property of accommodating for darkness, while the perception of the colors belongs to the cones."

J. H. de Hass⁴ says: "Upon the discovery of this color change (in visual purple), which depends on chemical alteration in the nerve substance, it was at once assumed that the chemical action was the origin of the nerve current and this was believed all the more readily when it was found possible to fix permanent photographic pictures upon the retina. But this chemical hypothesis was overthrown by the consideration, that the rods only and not the cones possess the purple color, that there are animals which, having no rods, see without the aid of the purple, and that, in the human eye, the yellow spot where vision is acutest, presents no cones and no purple. It is supposed that the rods are adapted for the perception of white light, and the cones for colors."

De Hass continuing his very able article discredits the visual purple theory.

While many of our ablest writers believe that the visual purple is necessary to sight, there are just as many who do not believe that it is essential.

I will leave it with my readers to decide whether this peculiar phenomenon was due to some abnormal condition of the visual purple, or to inflammation with exalted function in the rods and cones.

³Third International Congress of Physiologists at Berne, September, 1895. (Ann. d'Oc., C. XIV).

⁴Klin. Monatsblätt. für Augenheilkunde, July, 1882, p. 219.

OPHTHALMIC DIGEST.

By J. ELLIS JENNINGS, M.D.,

OF ST. LOUIS, MO.

A CASE OF ACUTE LOSS OF VISION FROM DISEASE OF THE ETHMOID AND SPHENOID CAVITIES. H. F. HANSELL, M.D., (*The Philadelphia Polyclinic*, May 23, 1896).

R. D., aged 17, awoke one morning with severe headache located mainly in the frontal region, and almost absolute loss of vision. He had gone to bed the night before in his usual health and had no disturbance in his sight. Upon examination a week later the following ocular condition was noted: The lids and conjunctiva were normal, the cornea and anterior chamber clear—the latter of normal depth; the irides were moderately dilated, and absolutely unresponsive to light; the lenses were clear, the vitreous chambers were clouded by a great quantity of minute opacities; the fundus of each eye were dimly seen, but their condition could be determined with moderate accuracy; the optic discs were pale; the arteries slightly contracted, and the veins normal in calibre, the edges of the disc were not obscured by other exudation than that in the vitreous. Each retina was œdematous, and toward the periphery a few grayish curved lines, marking linear detachments of the retina from the choroid, were visible in the lower parts. Vision was reduced to the perception of light in the extreme temporal parts of the field. In the absence of assignable cause for the ocular and cerebral œdema, he was referred to Dr. W. A. Freeman for examination of the cavities of his head. The view of the interior of the nose was completely obstructed anteriorly by immensely swollen turbinals, but posteriorly muco-pus in considerable quantity was seen flowing from the choanæ.

Thorough cocaineization produced contraction of the con-

gested intra-nasal tissues, and the fossæ soon became filled with thick purulent secretion. This came from both the superior and middle meatus, right and left, and from the upper back part of the left fossæ. Transillumination of the maxillary and frontal sinuses, together with absence of the other symptoms of any disease of these cavities, pointed clearly to the diagnosis of acute purulent inflammation of the anterior and posterior ethmoid cells on both sides, and the left sphenoid sinus. The ethmoid arteries, branches of the internal carotid through the ophthalmic, and the return veins which empty into the cavernous sinus bring the affected cells into most intimate connection with the circulation about the optic chiasm. Then, too, the inflammation of the sphenoidal sinus could readily produce injurious action directly upon the chiasm which immediately overlies it and from which it is separated by a very thin plate of bone. Atropin internally, together with appropriate local treatment of the intra-nasal congestion quickly caused the inflammation to subside, and in about ten days the nasal condition was normal, and there was no return of the inflammation of the sinuses. Notwithstanding the efficient nasal treatment, improvement of vision has been inconsistently slight. Day by day the arteries and veins of the retinae have become more and more contracted until they can scarcely be recognized as blood-vessels, the disc paler and more atrophic, and the retinae degenerated until normal structure has almost disappeared. The case is one of deep interest because of its rarity, and because it illustrates the intimate and fatal causal connection that may exist between nasal and eye disease.

DIRECT MASSAGE AS AN AID IN THE TREATMENT OF CERTAIN HYPERPLASIE OF THE ANTERIOR OCULAR SEGMENT. H. McI. MORTON, M.A., M.D. (*Annals of Ophthalmology and Otology*, Vol. V, No. 11).

The cornea is rendered insensitive by a 10 per cent. solution of cocaine, which at the same time, by its action upon the corneal epithelium, facilitates the entrance of the drug used. The eyelids are separated with the thumb and forefinger of

the left hand, and the massage spoon is held in the right. The cornea is gently rubbed alternately in a circular and radiating manner, from one to three minutes, and this is repeated as often as is indicated in the individual case. It is to be remembered that the uvea, or region just external to the corneal limbus, nourishes the cornea, the lens and the vitreous and is the great lymph producer for the eye, particularly the anterior segment. For this reason I desire to lay stress upon the fact that these movements should not be confined to the area immediately adjacent to the opacity, but should be applied not only all over the cornea, but also to the ciliary zone upon the sclera. After the massage has been practiced, I knead the globe with the thumbs of my two hands, carefully and thoroughly. By following out this, the lymph-channels are thoroughly opened, and the activity of the lymph-currents is increased.

As I have said in my first paper, we can not hope to entirely clear up a dense cicatricial mass as the result of a deep ulceration of the corneal stroma, but we may look for improvement in opacities in general in two ways: First, we know that surrounding this dense central mass there is, very often, an area of less dense opacity, due to cellular infiltration, and imperfectly organized corneal tissue. I have noticed that this infiltrated area has cleared up in a large number of cases, and vision has much improved. In the second place ulcers which have attacked the epithelial or superficial corneal layers only, leave opacities which are much benefited or are entirely dispersed by massage.

This method has been of noticeable value in hastening the reabsorption of episcleral nodules and in that intractable disease sclero-keratitis. The massage-spoon which I use is a spatula 6 mm. wide by 8 mm. long, traversed by three grooves, thus making four branches, which are perfectly rounded in order to prevent injury to the cornea. It will be seen that the cornea is thrown into several furrows, which, as the massage-spoon is moved over the surface, include the cornea and circum-corneal zone.

This is unattended with any injury and with very little or no discomfort to the patient. In some cases it is unnecessary to use cocaine, so tolerant does the eye become.

MISCELLANY.

DR. EDWARD JACKSON, having returned to Philadelphia, will resume his clinical service and teaching at the Philadelphia Polyclinic and Wills Eye Hospital.

DR. B. E. FRYER of Kansas City has been elected Clinical Professor of Ophthalmology and Otology in the University Medical College, Kansas City, Mo. We heartily congratulate the College.

A NEW LECTURERSHIP in Ophthalmology at Queen's College, Belfast, has recently been created in accordance with the regulations of the Royal University of Ireland, and the Council has appointed Dr. W. A. M'Keown as the first incumbent of the new office.

AN IDEAL NON-IRRITATING SALVE is claimed by Dr. W. Allan Johnson (*Brit. Jour. Derm.*, April, 1896), to be made by the following process:

R	Lanolini,	-	-	-	-	-	3iij.
	Ol amygdalæ,						
	Aq. dest., āā	-	-	-	-	-	3ss.

M.

If smeared thinly on the lids this occasions no unpleasantness it may be employed when it is desirable to use a salve to prevent the lids from being glued together from any increase of the lachrymal secretions. It is, however, better to add a grain or so of boric acid to prevent any possible rancidity, though this is not likely to happen even though the ointment be kept for some time. In eczema of the lids this salve forms a pleasing vehicle for the yellow oxide of mercury so beneficial in those cases, two grains being added to the half-ounce. According to the testimony of patients, the salve gives a pleasing sensation of coolness without a trace of smarting or irritation. Its curative influence, the author says is equal, if not superior, to that of any of the other eye-salves prepared with other bases.

HONORS TO DR. ARGYLL ROBERTSON.

Dr. Argyll Robertson has been honored by the Edinburgh University with the degree of LL.D. In presenting him, Professor Grant said: "There are none upon whom the University can more fittingly bestow its highest honor than those who have risen to pre-eminence in that noble profession for which the bulk of our students are occupied in equipping themselves. In the special Department of Ophthalmology, Dr. Argyll Robertson—it is indeed superfluous to remind an Edinburgh audience—holds a unique position. Countless voices will bear grateful testimony to the skill of the practitioner whose healing hand has literally lightened the darkness of their lives. But his reputation rests peshaps in a greater degree on his work as an original investigator. He has examined with fruitful results the mode in which the eye accommodates itself to the objects near and distant, and the effects of medicine on that adjustment; and above all, he has discovered that certain symptoms of the pupil are indicative of a disease of the spinal cord. These symptoms have now in the medical world become associated with Dr. Argyll Robertson's name. The regard in which he is held is testified to by his appointment to many distinguished offices. He was for several years lecturer on ophthplmology in the University of Edinburgh, and it was with a lively regret that the University received last year his resignation of an office which he had discharged with such acceptance. He has enjoyed the rare distinction of acting as President of the International Ophthalmological Congress, and he is the only oculist not resident in London who has been called to fill the Chair of the Ophthalmological Society of the United Kingdom. (Applause). To these distinctions, sir, I now ask you to add that of Doctor of Laws in this University. (Applause).

DR. G. BERRY has been elected to fill Dr. Argyll Robertson's place at the Edinburgh University.

BOOKS AND PAMPHLETS.

TECHNIQUE DE L'EXPLORATION OCULAIRE. Par
L. VIGNES. Paris. A. MALOINE, Editeur. 21 Place de
L'Ecole-de-Medicine.

Since Landolt's admirable little book of a similar kind no better introduction to the study of ophthalmology has been presented than Vigne's excellent work on the examination of the eye. It is much more exhaustive than Landolt and in many respects rather too technical for the beginner but the arrangement is logical and we have here an excellent digest of the entire subject. Commencing with a chapter on the anatomy of the eye, a short but very clear statement is made of its embryogenesis, and the author then passes at once to the physiology and to physiological optics. Just enough is given of the latter to show its practical bearing in the detail of examination and to illustrate well the principles upon which depend the ophthalmoscope, the ophthalmometer and other instruments of precision used for testing vision. The chapter on the movements of the eye deals first with the binocular vision and then the methods of clinical examination are all set forth, the writer not allowing himself to be drawn into discussions in regard to the mooted point of muscular dynamics, however tempting they may be. In a word, Vigne gives to us a clear statement of the most recent facts in regard to the questions with which he deals, and if a translation were offered to the English reading portion of the profession, this would probably be as popular a text-book with us as it has already become with those for whom it was first intended. It is apparently the first of a complete system of ophthalmology and the other volumes will be certain of a welcome if they reach the same high standard of excellence, as has this. L. H.

PAMPHLETS.

"Indio." By Walter Lindley, M.D.

"Aseptolin." By Cyrus Edson, M.D.

"Report sur la vision binoculaire, sa perte et son rétablissement." By Dr. Ed. Meyer.

"A Case of Paranoia Unrecognized for Twenty-eight Years and Its Lesson." By E. C. Runge, M.D.

"Eine Augenspiegellampe, etc." By Dr. O. Eversbusch. (An ophthalmoscopic lamp for gas or electric light).

"Errors in the Literature on Javal's Ophthalmometer for the Measure of Astigmatism." By G. W. Grove, M.D.

"Isolated Rupture of the Iris, Unaccompanied by Injury to any of the Adjoining Structures." By Wendell Reber, M.D.

"A Perfected Series of Test-Words Intended for the Determination and Estimation of the Power of Accommodation." By Ch. A. Oliver, M.D.

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